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| 09/710,611 | 11/08/2000 | Janet M. Wasowicz | 2100632-991141 | 5585 |

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GARY CARY WARE & FREIDENRICH
1755 EMBARCADERO
PALO ALTO, CA 94303-3340

| EXAMINER |
|---|
| SOTOMAYOR, JOHN |

| ART UNIT | PAPER NUMBER |
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| 3714 | |

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Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. 09/710,611 | Applicant(s) WASOWICZ, JANET M. | |
|---|---|---|---|
| | Examiner John L Sotomayor | Art Unit 3714 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *08 November 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *3* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-4,6-8,10,11,13-16, 21-24,26-28,30,31, and 33-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Jenkins et al (US 6,190,173).

4. Regarding claims 1 and 21, Jenkins et al discloses a computer with a graphical display that allows a user to interact with the computer (Fig 1), and presents a game that stimulates the user to improve reading and spelling skills by supplying sets of phonemes from which the user must select the desired phoneme from a set of distractor phonemes. This process increases the identification skills of the user in recognizing phonemes. Later, Jenkins et al provides a method to associate processed phonemes with their associated graphemes, thus providing the

correspondence between a sound and its associated symbol, and improving the spelling skills of the user as well. (Col 3, lines 34-67 and Col 4, lines 1-20).

5. Regarding claims 2 and 22, Jenkins et al discloses that phonemes are presented to the user that show how words used in testing are formed, thus improving the morphological skills of the user during the test (Col 9, lines18-32).

6. Regarding claims 3 and 23, Jenkins et al discloses that an aural presentation of the grapheme is presented coincident with the grapheme, thus increasing the awareness of the connections between speech and printed forms of the word presented (Col 9, lines 34-41).

7. Regarding claims 4 and 24, Jenkins et al discloses that the game consists of a number of modules, each of which train the user in different skills (Col 8, lines 32 – 42).

8. Regarding claims 6 and 26, Jenkins et al discloses that auditory cues are presented to the user coincident with the presentation of a grapheme (Col 9, lines 34-36) and that a grapheme is presented when a phoneme is to be tested (Col 9, lines 19-21). In both situations, a cue is offered to the user to improve skill in language use and recognition.

9. Regarding claims 7, 8, 27 and 28, Jenkins et al discloses that the game adaptively trains a subject to distinguish between similarly sounding phonemes (Col 8, lines 43-44) and that the difficulty level of the training set changes based upon user performance (Col 10, lines 55-61).

10. Regarding claims 10, 11, 30 and 31, Jenkins et al discloses that the game may be stored on a server computer connected to a network and that information and updates may be downloaded from the server to the user's computer system as needed or requested (Col 5, lines 26-48).

11. Regarding claims 13 and 33, Jenkins et al discloses the ability for an administrator to customize the game for a particular user and load that information back to the user's computer from the server (Col 5, lines 39-42).

12. Regarding claims 14 and 34, Jenkins et al discloses the ability to store test scores on the server for users of the system (Col 5, lines 36-37).

13. Regarding claims 15 and 35, Jenkins et al discloses the ability to store and report game statistics for users of the system (Col 5, line 38).

14. Regarding claims 16 and 36, Jenkins et al discloses that an aural representation of a phoneme is presented to the user at the same time as the phoneme, thus improving the user's skill in recognizing the correspondence between sounds and symbols (Col 9, lines 59-61).

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. Claims 5,9,12,25,29 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jenkins et al.

17. Regarding claims 5 and 25, Jenkins et al discloses a plurality of modules that are available to the user, the selection of which will take the user to a game that teaches a different skill associated with distinct training exercises for improving language recognition including phonemes, graphemes, word formation, and auditory presentation of phonemes (Col 7, lines 46-

54 and Col 8, lines 32-36). Jenkins et al does not specifically disclose that the modules available are those listed in claim 5. However, since the modules listed in claim 5 deal with language and spelling training and Jenkins et al discloses multiple modules designed for the same function, it would have been obvious to one of ordinary skill in the art at the time of invention to provide modules capable of providing the language training functions enumerated in the claim.

18. Regarding claims 9 and 29, Jenkins et al discloses a stimulus stream of phonemes that begins with one distractor phoneme and increases up to three distractor phonemes as the user progresses (Col 10, lines 59-61). Jenkins et al also discloses that the game provides three levels of speech processing to enhance the subject's trained ability to discern the desired word (Col 11, lines 5-10). Jenkins et al does not specifically disclose increasing and decreasing the difficulty level of the game based upon the user's progress. However, user's begin at one level in the game discloses by Jenkins et al and move up as their skills progress, then move back to the beginning as the start a new phoneme group. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide the ability of increasing and decreasing the difficulty level of the game based upon the user's progress, or lack thereof.

19. Regarding claims 12 and 32, Jenkins et al discloses that the games used to train users are software and may be stored on and downloaded from a server (Col 5, lines 26-38). A very common and well-known method for distributing all types of software packages is on compact disk, from which they may be loaded into any computer system with an appropriate input device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to store the software package on a compact disk for later distribution to users.

20. Claims 17-19, 37-39, 45, 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jenkins et al in view of Siegel (US 6,009,397).

21. Regarding claims 17 and 37, Jenkins et al discloses that a user must sort words out of a larger grouping in order to finish the game successfully (Col 8, lines 42-58). Jenkins et al does not specifically disclose that words are sorted to identify patterns in printed words. Siegel teaches that as a part of sorting, the user is expected to select a word or group of words to form a group of words that meet suitable criteria from a larger set of entries (Col 2, lines 1-8). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to create a task for the user comprising sorting words to identify a specified pattern in the printed words.

22. Regarding claims 18 and 38, Jenkins et al does not disclose that words are selected on first, middle or final portions of the words. However, Siegel teaches that phonemes are selected and placed in beginning and ending placements for selecting words, as well as prefixes, suffixes, blends and root words (Col 2, lines 34-54). Siegel also teaches that alternative methods of selecting words can include selection by initial, medial and final sounds (Col 8, lines 53-58). Thus, sorting words can be accomplished by selecting words by the position of the beginning, medial, ending or other special phoneme. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a sorting task that sorts words according to the beginning, middle or ending portion of the words.

23. Regarding claims 19 and 39, Jenkins et al does not disclose that when selecting words a user may select them and sort them into semantic categories. However, Siegel teaches a Talking Dictionary software construct that allows users to perform a selection using a number of different

categorizations for the selection of desired words (Col 6, Table 3 and Col 8, lines 1-64). Thus, when selecting words to use for instruction, sorting words by semantic category would be one of a plurality of desirable categorizations. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide the ability to provide a task to have the user sort words into one or more semantic categories.

24. Regarding claims 45 and 49, Jenkins et al discloses that a computerized game may be used to improve a user's skills at recognizing patterns in words (Col 6, lines 32-57). Jenkins et al does not specifically disclose that users of the training game are presented words sorted into categories. However, Siegel teaches that sorting words in a language training device can form the basis of a word game or other game (Col 3, lines 3-5). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a method and system for the training game that sorts words into categories to improve a user's skills at recognizing patterns in words.

25. Claims 20, 40-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jenkins et al in view of Morgan (US 5,596,698).

26. Regarding claims 20 and 40, Jenkins et al discloses a game for use by subjects that provides training exercises for improving language recognition in subjects who abnormally process phonemes and acoustic events (Col 7, lines 46-51). However, Jenkins et al does not specifically disclose that this game is capable of identifying words spelled in a reverse order from a target word. However, Morgan teaches a training computer that may be programmed for those with disabilities in language recognition that specifically identifies word reversal, dyslexia and other disorders (Col 5, lines 2-9). Therefore, it would have been obvious to one of ordinary

skill in the art at the time of invention to provide a software module in the training game to require users to identify words in which spelling is in reverse order to a target word to provide identification and training for dyslexic and other language skill challenged users.

27. Regarding claims 41 and 43, Jenkins et al discloses a method and computer system for training a user's spelling and reading skills that visually presents, on a graphic display, a target word, followed by a set of distractor words, and requesting the user identify the target word (Col 10, lines 55-61). Jenkins et al does not specifically disclose that the letters of the word to be identified are in reverse order of the target word. However, Morgan teaches a computer learning device that can be programmed to identify reversals, dyslexia and other disabilities (Col 5, lines 2-9). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a software module in which user would be requested to identify the word whose letters are in reverse order to the target word.

28. Regarding claims 42 and 44, Jenkins et al discloses a computer training system that receives a response from a user, analyses the response for a correct choice, and provides feedback to the user about the selected word (Col 10, lines 6-22).

29. Claims 46-48 and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jenkins et al in view of Rothenberg (US 6,134,529).

30. Regarding claims 46 and 50, Jenkins et al discloses a system and method for increasing a user's skill in reading and writing. Jenkins et al does not specifically disclose that this system and method uses categorization to increase the user's skill. However, Rothenberg teaches that a language learning program may present categories of words to the user with the expectation of analyzing the response for correctness and then provide feedback to the student about their

choice (Col 8, lines 5-21). The use of categories to provide user feedback on correctness increases the user's skill in recognizing correct members of the category, increasing the user's language skill. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide an ability to present categories of words for a response, analyzing the selection, and providing feedback to the user concerning correctness of the response.

31. Regarding claims 47 and 51, Jenkins et al discloses a system and method for increasing a user's skill in reading and writing. Jenkins et al does not specifically disclose using semantic categories as a method for increasing the user's skill. However, Rothenberg teaches a language training system and method that uses categories of words for instruction (Col 8, lines 5-21) and that semantic content may be a secondary method of categorization and instruction (Col 2, lines 1-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide language skill building activities through the use of semantic categories of words.

32. Regarding claims 48 and 52, Jenkins et al does not specifically disclose that semantic categories are used to build the user's skill in language training, or that the categories may comprise one or more of colors, numbers, shapes, animals, objects and people. However, Rothenberg teaches that categories of items presented to a user in a skill building training game may be presented as one of a fruit, an animal, or other categorization (Col 8, lines 31-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide language training through the use of semantic categories as represented by any one of colors, numbers, shapes, animals, objects, people, or other categories.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jenkins et al (6,328,569) provides a discussion of a game providing language instruction through the use of phonemes and graphemes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L Sotomayor whose telephone number is 703-305-4558. The examiner can normally be reached on 7:30-4:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jessica Harrison can be reached on 703-308-2217. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7768 for regular communications and 703-308-7768 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-4119.

jls
May 15, 2002

V. Martin Wallace

VALENCIA MARTIN-WALLACE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700